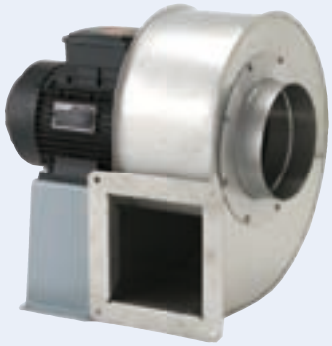
> DIC-INOX

Piccoli ventilatori centrifughi in acciaio inossidabile

Small size centrifugal fans in stainless steel



DESCRIZIONE GENERALE

I ventilatori centrifughi della serie DIC sono adatti per il convogliamento di fumi corrosivi, fino alla temperatura massima di 80°C. Trovano il loro impiego in tutte quelle applicazioni industriali dove siano richiesti piccoli volumi d'aria con alte pressioni. Il motore è direttamente accoppiato. La cassa è facilmente orientabile, anche in sito, di 45° in 45°, compresi gli angoli 180° e 225°.

COSTRUZIONE

- Cassa a spirale realizzata in acciaio inossidabile AISI304.
- Girante a semplice aspirazione, realizzata in acciaio inossidabile AISI304, con pale curve in avanti (sirocco), a spessore costante.
- Esecuzione 5 (accoppiamento diretto con girante a sbalzo su motore flangiato).
- Orientamento standard LG 270°.
- Motore asincrono trifase o monofase a norme IEC34-IEC72 e 89/392EEC-89/336EEC-73/23EEC e marcati CE. Forma B3/5, IP55, classe F. DIC 100 T e M con motore forma B14, IP44, classe B. Tutti idonei ad un servizio S1 (funzionamento continuo a carico costante).
- Motorizzazioni:
- DIC-INOX: motore asincrono trifase o monofase a norme internazionali IEC 60034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE e marcato CE IP55, classe F, forma B35. DIC-INOX 100 T e M con motore forma B14, IP44, classe B.
- DIC-INOX/ATX: motore asincrono trifase o monofase II2G, II2D, II2GD a norme internazionali IEC 60034, IEC 60072, IEC 60079 e/o IEC 61241, EMC 2004/108/CE, LVD 2006/95/CE, con certificati ATEX e marcatura CE, IP 55/IP 65, classe F, forma B35.
  Tutti idonei ad un servizio S1 (funzionamento continuo a carico costante).

ACCESSORI

- Rete di protezione per bocca aspirante e premente realizzata a norma UNI 10615.
- Supporto portamotore, realizzato in lamiera protetta contro gli agenti atmosferici.

A RICHIESTA

- DIC-INOX 100 con motore asincrono trifase o monofase a norme internazionali IEC 60034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE e marcato CE IP55, classe F. forma B35 (DIC-INOX 100 MEC).
- Rotazione RD a richiesta.
- Versione idonea al trasporto di gas caldi, max 150°C (DIC-INOX/AT).

INSTALLAZIONE

I ventilatori centrifughi con girante a pale curve in avanti devono sempre funzionare collegati a tubazioni o prevedere sistemi, che con la loro resistenza (ad esempio serrande di taratura), ne limitino la portata in modo tale che i valori di corrente assorbita rientrino nei valori ammissibili riportati sulla targa del motore elettrico.

GENERAL DESCRIPTION

The centrifugal fans of the DIC series are designed for conveyance of corrosive smoke, up to a maximum temperature of 80°C. They are installed in all the industrial applications where small air volumes and high pressures are required. The motor is directly coupled. The case is easily revolving, also at site, by 45° steps, 180° and 225° included.

CONSTRUCTION

- *Volute in stainless steel AISI304 sheet.*
- *Single inlet forward bladed impeller (sirocco), in stainless steel AISI304.*
- *Execution 5 (with impeller directly coupled to flanged motor)*
- *Standard orientation LG270°.*
- *Motorizations:*
- *DIC-INOX: asynchronous three-phase or single-phase motors according to international standards IEC 600034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE, CE marked, IP 55, class F, B35 shape. DIC-INOX 100 T and M with motor shape B14, IP44, class B.*
- *DIC-INOX/ATX: asynchronous three-phase motors or single-phase II2G,II2D,II2GD according to international standards IEC 60034, IEC 60072, IEC 60079 and/or IEC61241, EMC 2004/108/CE, LVD 2006/95/CE, with Atex certification, CE marked, IP55/IP 65, class F, B35 shape.*
  All motors suitable to S1 service (continuous working at constant load).

ACCESSORIES

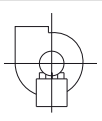
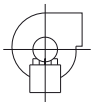
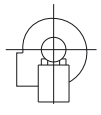
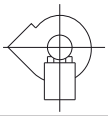
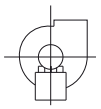
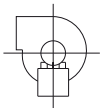
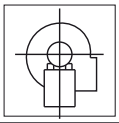
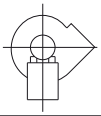
- *Inlet and outlet protection guard according to UNI 10615 norm.*
- *Motor support in steel sheet protected against atmospheric agents by epoxy paint.*

UPON REQUEST

- *DIC-INOX 100 with asynchronous three-phase or single-phase motors according to international standards IEC 600034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE, CE marked, IP 55, class F, B35 shape (DIC-INOX 100 MEC).*
- *Rotation RD upon request.*
- *Version suitable to convey hot gases, up to 150°C maximum (DIC-INOX/AT).*

INSTALLATION

The centrifugal fans with forward curved impellers must always be installed to ducted systems, eventually with the use of additional resistance (for example setting shutters), that can limit the air flow in such a way that the absorbed current is within the acceptable values stated on the motor rating label.

Rotazione *Rotation* RD								
Forma/*Form*	0°	45°	90°	135°	180°	225°	270°	315°
Rotazione *Rotation* LG								

N.B.: Orientamento standard LG270°
Standard discharge angles LG 270°

PRESTAZIONI *Performance* DIC-INOX

Frequenza 50Hz – Temperatura dell'aria 15°C – Pressione barometrica 760 mm Hg – Peso specifico dell'aria 1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

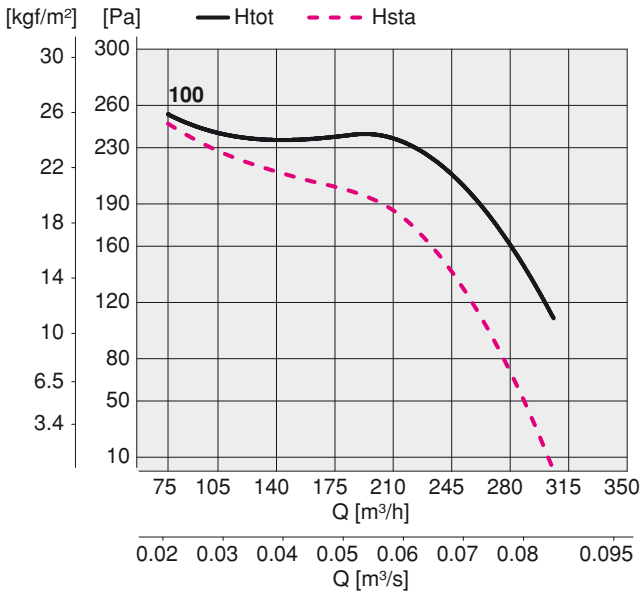
Lp: livello di pressione sonora rilevato a 1,50 m - ***Lp:*** *sound pression level measured at 1,50 m*

DIC-INOX 100

Tipo Type	Modello Model	U	P	Pm (kW)	In (A)	IP/CL	Lp dB(A)
DIC-INOX	100/2	M	2	0,05	0,36	44/B	59
DIC-INOX	100/2	T	2	0,05	0,17	44/B	59
DIC-INOX ATX	100/2	M	2	0,12	1,10	55/F	59
DIC-INOX ATX	100/2	T	2	0,12	0,40	55/F	59

Limiti d'impiego - *Operational limit*

Tipo Type	Modello Model	Q max (m^3/h)	Pt min (mm H_2O)	C max (m/s)	S (m^2)	Pd² (kgm^2)	Mot. (Gr)
DIC-INOX	100/2	305	11	13,31	0,006384	0,0016	50

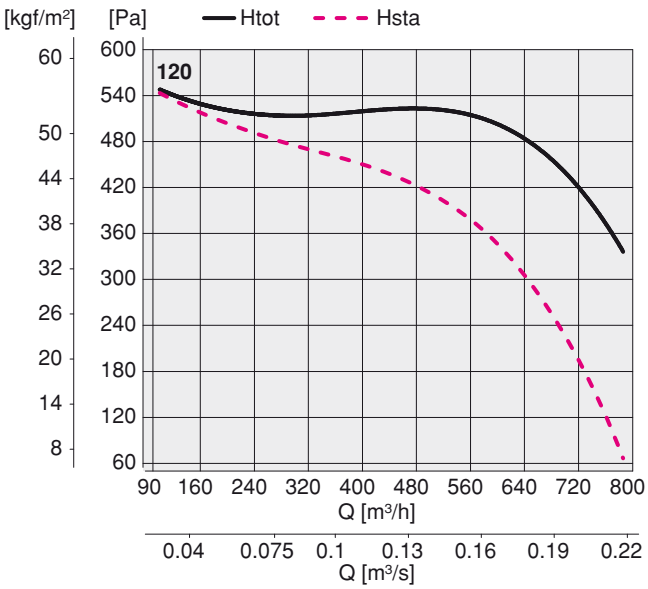


DIC-INOX 120

Tipo Type	Modello Model	U	P	Pm (kW)	In (A)	IP/CL	Lp dB(A)
DIC-INOX	120/2	M	2	0,25	1,85	55/F	63
DIC-INOX	120/2	T	2	0,25	0,71	55/F	63
DIC-INOX ATX	120/2	M	2	0,25	2,20	55/F	63
DIC-INOX ATX	120/2	T	2	0,25	0,82	55/F	63

Limiti d'impiego - *Operational limit*

Tipo Type	Modello Model	Q max (m^3/h)	Pt min (mm H_2O)	C max (m/s)	S (m^2)	Pd² (kgm^2)	Mot. (Gr)
DIC-INOX	120/2	790	28	21,14	0,010404	0,0036	63



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Frequenza 50Hz – Temperatura dell'aria 15°C – Pressione barometrica 760 mm Hg – Peso specifico dell'aria 1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

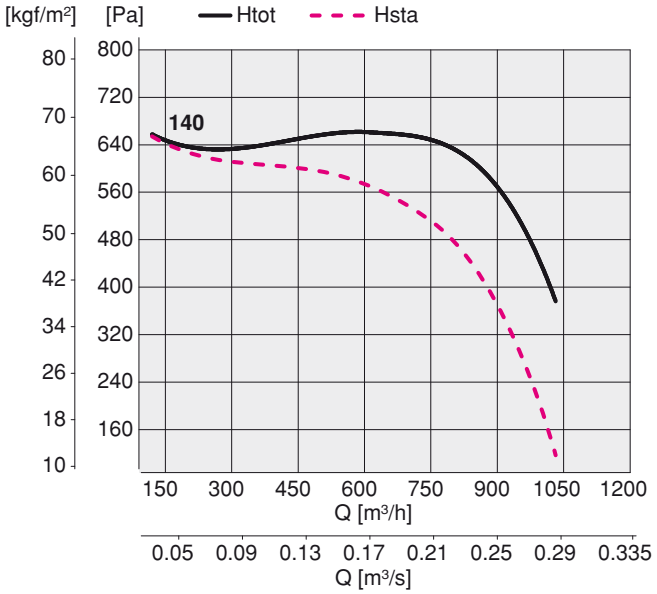
Lp: livello di pressione sonora rilevato a 1,50 m - ***Lp:*** *sound pression level measured at 1,50 m*

DIC-INOX 140

Tipo Type	Modello Model	U	P	Pm (kW)	In (A)	IP/CL	Lp dB(A)
DIC-INOX	140/2	M	2	0,37	3,10	55/F	70
DIC-INOX	140/2	T	2	0,37	1,10	55/F	70
DIC-INOX ATX	140/2	M	2	0,37	2,50	55/F	70
DIC-INOX ATX	140/2	T	2	0,37	0,97	55/F	70

Limiti d'impiego - *Operational limit*

Tipo Type	Modello Model	Q max (m^3/h)	Pt min (mm H_2O)	C max (m/s)	S (m^2)	Pd² (kgm^2)	Mot. (Gr)
DIC-INOX	140/2	1025	26	20,50	0,013924	0,0064	71

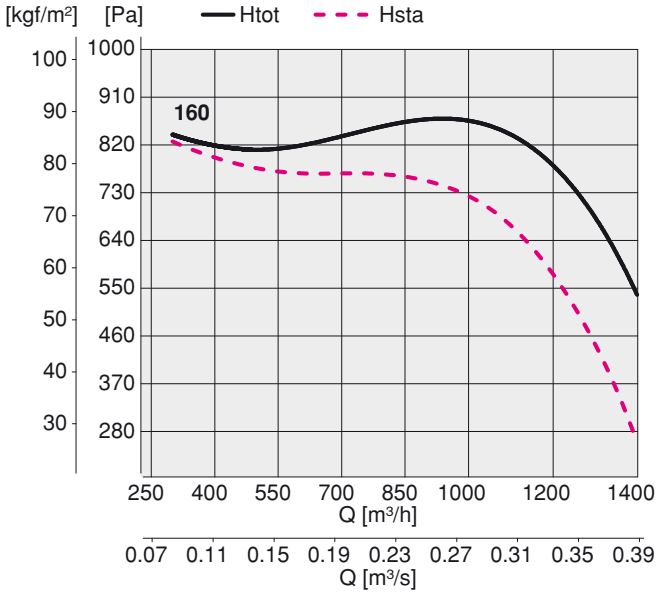


DIC-INOX 160

Tipo Type	Modello Model	U	P	Pm (kW)	In (A)	IP/CL	Lp dB(A)
DIC-INOX	160/2	M	2	0,75	5,20	55/F	75
DIC-INOX	160/2	T	2	0,75	1,90	55/F	75
DIC-INOX ATX	160/2	T	2	0,75	1,73	55/F	75

Limiti d'impiego - *Operational limit*

Tipo Type	Modello Model	Q max (m^3/h)	Pt min (mm H_2O)	C max (m/s)	S (m^2)	Pd² (kgm^2)	Mot. (Gr)
DIC-INOX	160/2	1385	81	21,16	0,018225	0,0104	80

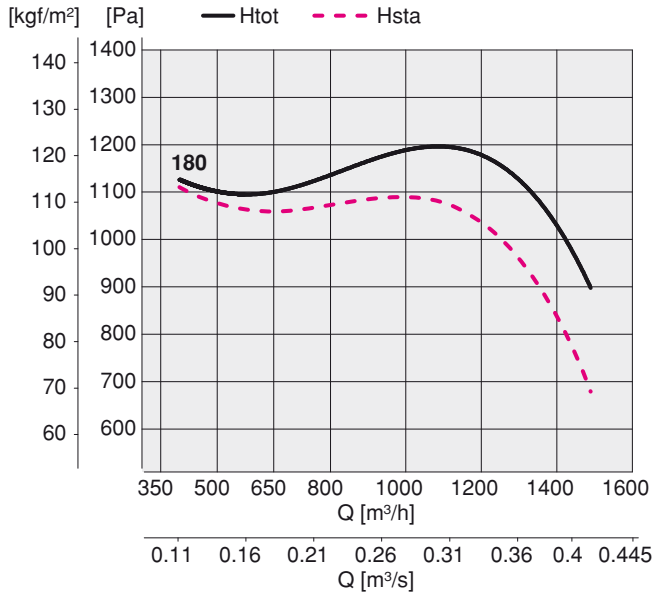


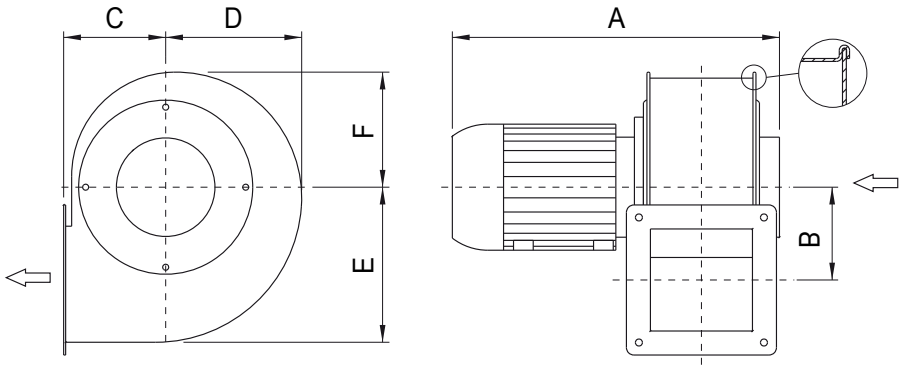
DIC-INOX 180

Tipo Type	Modello Model	U	P	Pm (kW)	In (A)	IP/CL	Lp dB(A)
DIC-INOX	180/2	T	2	1,10	2,50	55/F	76
DIC-INOX ATX	180/2	T	2	1,10	2,50	55/F	76

Limiti d'impiego - *Operational limit*

Tipo Type	Modello Model	Q max (m^3/h)	Pt min (mm H_2O)	C max (m/s)	S (m^2)	Pd² (kgm^2)	Mot. (Gr)
DIC-INOX	180/2	1520	97	19,29	0,021904	0,02	80

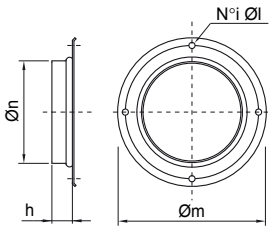




TIPO *TYPE*	A	B	C	D	E	F	kg
DIC-INOX 100	285	82	89	112	130	99	4
DIC-INOX 120	325	97	102	137	156	116	7
DIC-INOX 140	350	115	123	158	184	136	8
DIC-INOX 160	425	132	143	175	207	148	15
DIC-INOX 180	445	140	152	200	227	171	18

Dimensioni in mm / *Dimensions in mm*

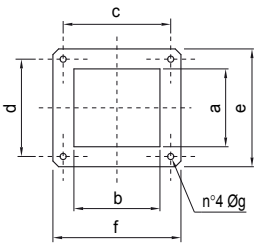
BOCCA ASPIRANTE - *INLET*



TIPO *TYPE*	Øn	h	Øm	i	I
100	100	20	130	4	6
120	125	20	160	4	6
140	125	30	180	4	6
160	160	40	222	8	6
180	160	40	222	8	6

Dimensioni in mm / *Dimensions in mm*

BOCCA PREMENTE - *OUTLET*

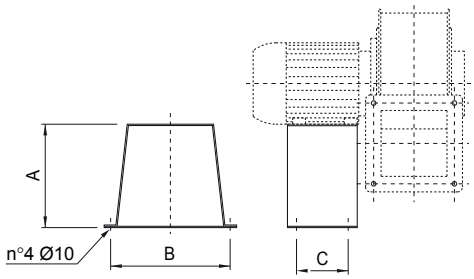


TIPO *TYPE*	a	b	c	d	e	f	Øg
100	76	84	105	95	115	125	6
120	102	102	125	125	150	150	7
140	118	118	148	148	175	175	8
160	135	135	165	165	195	195	8
180	148	148	180	180	210	210	8

Dimensioni in mm / *Dimensions in mm*

ACCESSORI *Accessories*

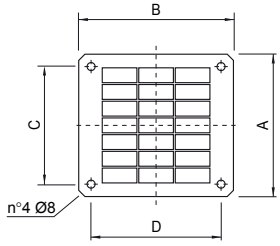
SEDIA PORTAMOTORE - *MOTOR SUPPORT*



TIPO *TYPE*	A	B	C	kg
100	120	140	71	1
120	160	185	80	1,3
140	160	185	80	2
160 - 180	180	230	100	2,5

Dimensioni in mm / *Dimensions in mm*

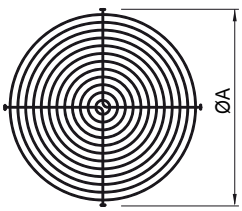
RETE BOCCA PREMENTE - *OUTLET GUARD*



TIPO *TYPE*	A	B	C	D	kg
100	115	125	95	105	0,06
120	150	150	125	125	0,12
140	175	175	148	148	0,13
160	195	195	165	165	0,15
180	210	210	180	180	0,2

Dimensioni in mm / *Dimensions in mm*

RETE BOCCA ASPIRANTE - *INLET GUARD*



TIPO *TYPE*	ØA	kg
100	100	0,04
120 - 140	125	0,06
160 - 180	160	0,07

Dimensioni in mm / *Dimensions in mm*

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RESISTENZA DEI MATERIALI ALLA CORROSIONE

Corrosion resistance material guide

AGENTE / *AGENT*	Materiale / *Material* PVC	PE	PP	AISI 304
Acetone/*Acetone*	3	2	3	1
Acido acetico/*Acetic acid*	2	1	1	1
Acido citrico/*Citric acid*	1	1	1	1
Acido cromico/*Chromic acid*	1	1	1	3
Acido lattico/*Lactic acid*	2	1	1	2
Acido fosforico/*Phosphoric acid*	1	2	1	2
Acido tartarico/*Tartaric acid*	2	1	1	n.d.
H2O	1	1	1	1
Alcool etilico/*Alcohol ethylic*	2	3	3	1
Alluminio/*Alumionium*				
Cloruro/*Chloride*	1	1	n.d.	1
Solfato/*Sulphate*	1	1	1	1
Idrossido/*Hydroxide*	1	n.d.	n.d.	1
Ammoniaca/*Ammoniac*				
Cloruro/*Chloride*	1	1	n.d.	3
Fosfato/*Sulphate*	1	1	1	1
Idrossido/*Hydroxide*	1	n.d.	n.d.	1
Argento/*Argent*				
Nitrato/*Nitrate*	2	1	1	1
Bario/*Barium*				
Cloruro/*Chloride*	1	1	1	1
Solfato/*Sulphate*	1	1	1	1
Idrossido/*Hydroxide*	1	1	1	n.d.
Benzene /*Benzene*	3	3	3	1
Benzina/*Gasoline*	1	1	3	1
Bromo liquido /*Bromine liquid*	3	3	3	3
Calcio/*Calcium*				
Cloruro/*Chloride*	1	1	n.d.	2
Carbonato/*Carbonate*	1	1	1	1
Carbonio/*Carbon*				
Monossido/*Monossido*	1	1	1	1
Tetracloruro/*Tetrachloride*	3	3	3	3
Cloro/*Chlorine*				
Gassoso secco/*Gas dry*	3	n.d.	3	3
Gassoso umido/*Gas moist*	2	n.d.	3	3
Clorobenzene/*Chlorobenzene*	3	n.d.	3	1
Fenolo/*Phenol*	2	1	1	1
Ferro/*Iron*				
Nitrato/*Nitrate*	1	1	n.d.	2
Solfato/*Sulphate*	1	1	n.d.	2

AGENTE / *AGENT*	Materiale / *Material* PVC	PE	PP	AISI 304
Formaldeide/*Formaldehyde*	2	1	1	1
Furfurolo/*Furfural*	3	2	2	1
Idrogeno/*Hydrogen*				
Perossido/*Peroxide*	1	2	2	2
Solfuro/*Surphur*	2	1	1	1
Magnesio/*Magnesium*				
Cloruro/*Choride*	1	1	1	1
Carbonato/*Carbonate*	1	n.d.	1	1
Nitrato/*Nitrate*	1	1	1	1
Nafta/*Naphtha*	3	3	3	1
Nichel/*Nickel*				
Cloruro/*Chloride*	1	1	1	2
Solfato/*Sulphate*	1	2	1	1
Nitrato/*Nitrate*	1	1	1	1
Potassio/*Potassium*				
Cloruro/*Chloride*	1	1	1	1
Cianuro/*Cyanide*	1	1	1	1
Nitrato/*Nitrate*	1	1	1	1
Solfato/*Sulphate*	1	1	1	1
Rame/*Copper*				
Cianuro/*Cyanide*	3	n.d.	1	1
Cloruro/*Chloride*	1	1	1	3
Nitrato/*Nitrate*	2	1	1	1
Solfato/*Sulphate*	1	1	3	1
Sodio/*Sodium*				
Acetato/*Acetate*	1	1	1	1
Carbonato/*Carbonate*	1	1	1	1
Cloruro/*Chloride*	2	1	1	2
Clorato/*Chlorate*	1	1	1	1
Fosfato/*Phosphate*	1	1	1	1
Fluoruro/*Fluoride*	1	1	n.d.	2
Nitrato/*Nitrate*	1	1	1	1
Solfato/*Sulphate*	1	1	1	1
Zinco/*Zinc*				
Cloruro/*Chloride*	1	1	1	3
Nitrato/*Nitrate*	1	n.d.	1	n.d.
Solfato/*Sulphate*	1	1	1	1

ATTENZIONE: le indicazioni riportate nella tabella sono da considerarsi di carattere orientativo in quanto, per rendere di immediata lettura la tabella stessa, non si entra in merito alla concentrazione della soluzione acquosa dell'agente chimico (nel caso l'agente si possa trovare anche in soluzione) ed alla temperatura di lavoro.

1: resistenza "BUONA" - **2**: resistenza "LIMITATA" - **3**: resistenza " NULLA" - **n.d.:** "NON CONOSCIUTO"

ATTENTION: *the indications given in the table have to be considered as general guideline, as the concentration of the watery solution of the chemical agent (in case the agent is in a solution) and the working temperature are not taken into account.*

1: *resistance "GOOD" -* ***2:*** *resistance "LIMITED" -* ***3:*** *resistance "NONE" -* ***n.d.:*** *resistance unknown.*